



The API

7800

MASTER

MODULE



API, 8301 Patuxent Range Road, Jessup, MD 20794 Tel: 301-776-7879
www.apiaudio.com

A BASIC OVERVIEW OF THE API 7800 MASTER MODULE

Thank you for choosing the API 7800 MASTER MODULE.

The 7800 is a complete console control room section that can be used as a stand-alone master module or as a console control room section with as few as 2 inputs to as many inputs as desired. When used with the 7600 INPUT MODULE and 8200 LINE MIXER, a complete console can be built with Solo features, Mute Groups, Master send control, Bus masters, Cue and Talkback and a complete control room speaker monitoring section with input and tape monitoring!

The 7800 includes everything needed to control the summing and routing of the signals within a console system.

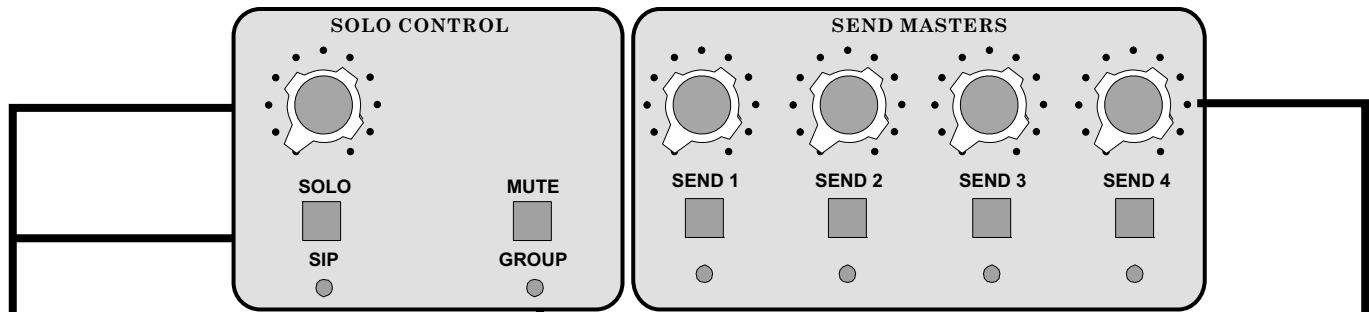
The 7800 serves as the master outputs for the 7600 and the 8200. It has SOLO and SIP controls, along with the SOLO master level control. The four sends from the 7600 and the two sends from the 8200 are summed into the 7800, which also provides the master level control and cut switch. The 7800 also is the BUS summing master for the 7600 BUS outputs, one through four. The STEREO master fader is located on the front panel and can be replaced with a full throw stereo fader through access from the rear.

The 7800 is equipped with a simple TALKBACK/SLATE feature on the front panel with an internal MIC preamp. TALKBACK to the sends with the CUE button and the rest of the busses is accessed with the SLATE button. Pressing either button will DIM the control room monitors. In the CONTROL ROOM section, you can monitor signal from the STEREO bus, the four SENDS, and three external TWO TRACK sources. There is a CONTROL ROOM level control, a DIM control with a switch, MAIN and SMALL speaker selections, STUDIO level with a switch, and CONTROL ROOM CUT switches to cut the signal to the monitors. On the rear panel is an XLR output for a pair of STEREO VU METERS.

The internal circuitry is exactly the same as the Legacy or Legacy Plus consoles. There is an API 2520 and output transformer for each of the SENDS and BUSES, including the STEREO BUS. The all discrete API 2510 op amp is used for all SOLO summing and CONTROL ROOM level control, just like the Legacy. The result? A portable Legacy Control Room Section!

All of the patchable outputs are 1/4 inch normalizing jacks, so an external patchbay can be interfaced easily. The METER out and the T/B MIC input are XLR jacks. The Busses and control ports are on mass termination connectors or D-Sub connectors conforming to the DA-88 pin-out. The external fader jacks are 1/4 inch jacks that bypass the internal rotary pot.

SOLO and Send Master Section



GROUP MUTE:
This switch will mute any 7600 that has it's MUTE A button pressed.

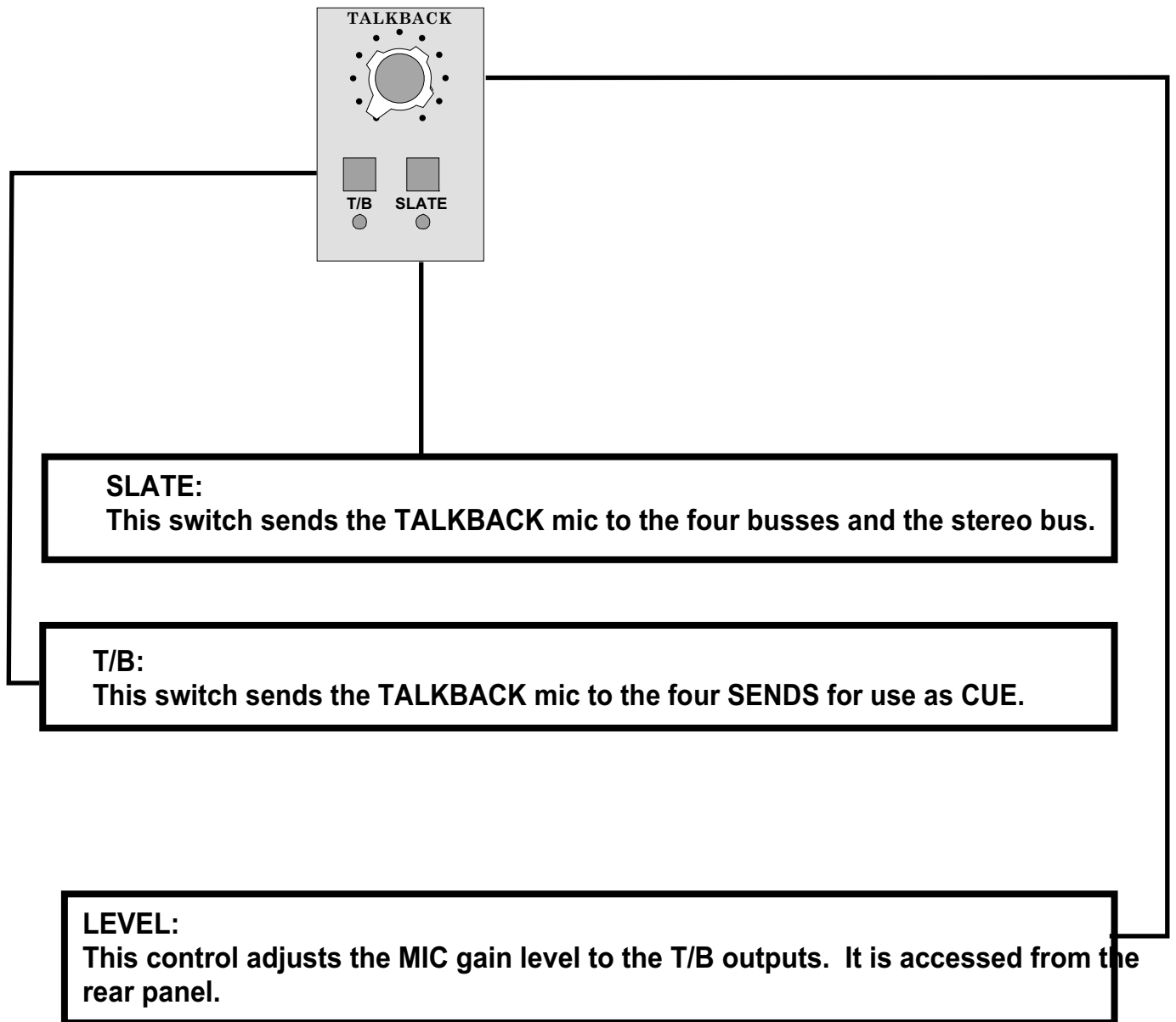
SOLO:

The SOLO button selects between normal AFL SOLO on the 7600 and 8200 and Solo In Place (SIP) on the 7600. When in SIP, the 7600s will solo in place but the 8200 remains in AFL solo. The LEVEL CONTROL adjusts the AFL level.

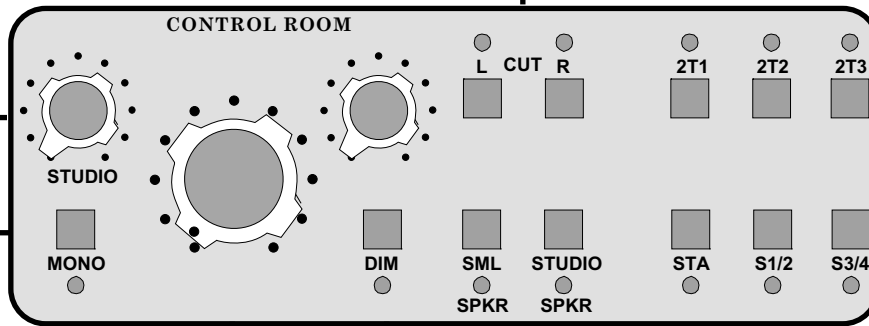
SENDS:

These switches and pots control the amount of level sent out the rear connector panel to the effect inputs. They are the masters for SENDS one through four on the 7600 and SENDS one/two on the 8200. The output is a balanced +4 level at the D-SUB.

Cue and TalkBack Section



Control Room Section



DIM:

This control sets the level of the DIM control room signal when the T/B buttons are pressed or the DIM button is pressed. It simply is another level control for the main level pot so you don't have to adjust the main level of the control room when you want the level lower.

MAIN CONTROL ROOM LEVEL:

This control sets the CONTROL ROOM speaker level to the large and small speakers. It is your MAIN VOLUME control

MONO:

This button makes the CONTROL ROOM SPEAKERS sum together in mono to check MONO compatibility of the signal. It does NOT effect the actual outputs of the stereo bus or any other output.

STUDIO:

This control sets the level of the control room input selection to the STUDIO speakers.

SPEAKER SELECT:

This button selects either the MAIN control room SPEAKERS or the SMALL SPEAKERS. The STUDIO button turns on and off the STUDIO SPEAKERS. REMEMBER to keep this button OUT as there is the possibility of FEEDBACK if there are any open mics in the STUDIO area.

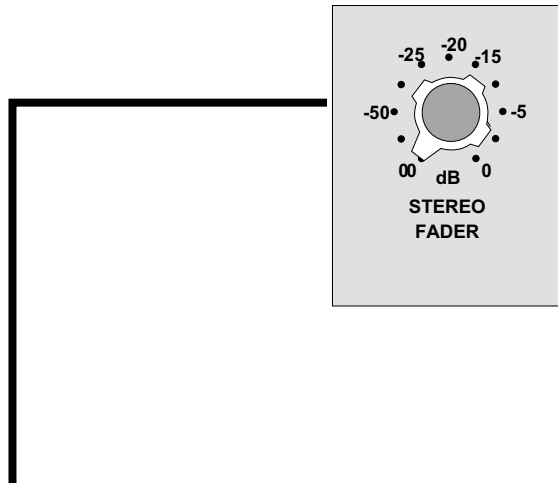
MONITOR SELECT:

These buttons select one of the three 2 track monitor inputs, the sends (1/2 left/right, 3/4 left/right) or the STEREO BUS. The 2T levels are balanced in and are at a level of +4. Keep in mind that a playback device like a cassette player or CD recorder/player may have -2 or -10 output levels, and that these levels may have to be boosted before plugging into the 7800.

Control Room CUT:

These switches CUT the LEFT and RIGHT side of the CONTROL ROOM MONITORS.

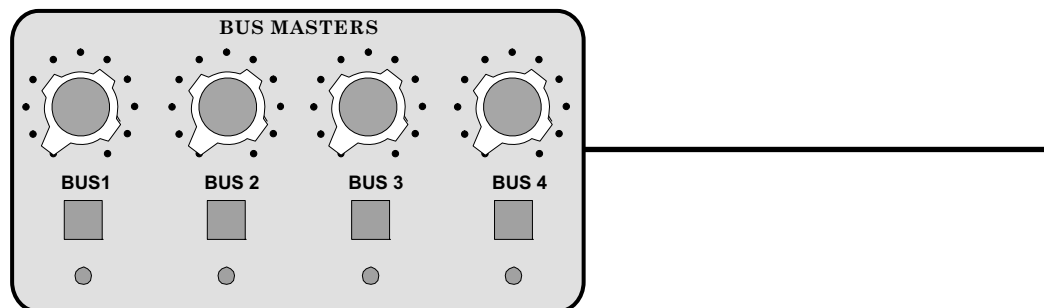
Stereo Fader Section



STEREO FADER:

This control is the final output control that feeds the stereo outputs. It is the **STEREO MASTER FADER**. It can be bypassed from the rear panel with a **FULL THROW STEREO FADER**.

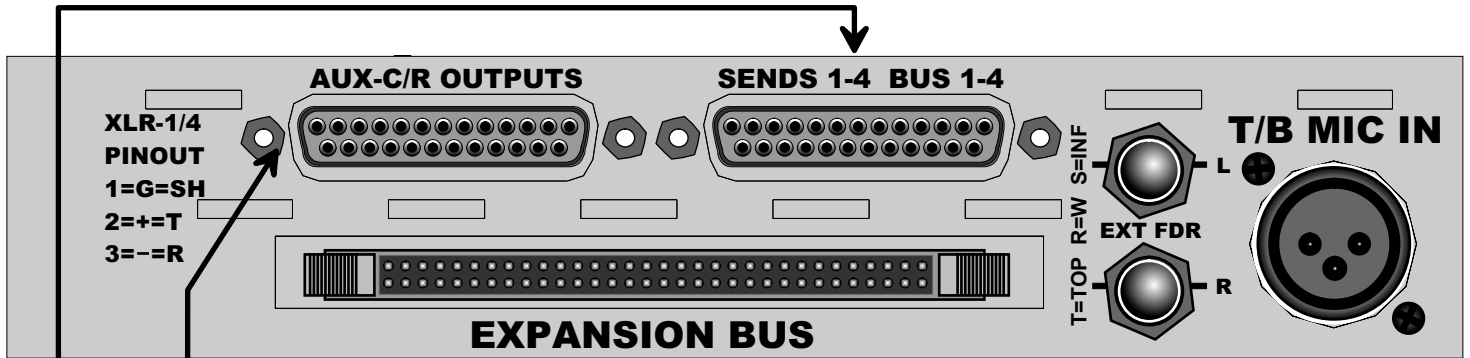
Bus Master Section



BUSES:

These switches and pots control the amount of level sent out the rear connector panel to the recorder inputs. They are the masters for BUSES one through four on the 7600 . The output is a balanced +4 level at the D-SUB.

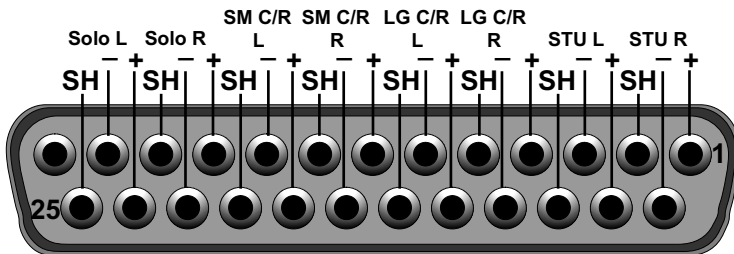
Rear Panel 1



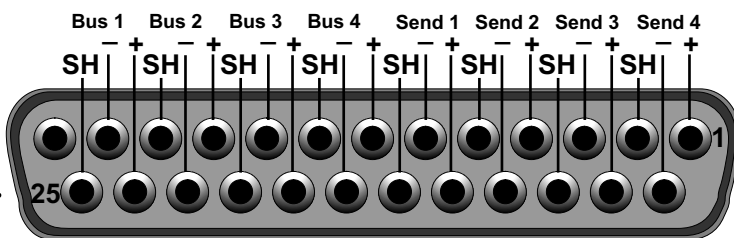
EXPANSION BUS
 This multipin connector is the control and master link for the 7600 and 8200.

T/B Mic Input

AUX-Control Room Outputs



Balanced Send/Bus Outputs



EXTERNAL STEREO FADER:
 These are the input jacks for a stereo external fader.

The wiring should be:
 TIP to the TOP of the fader. This wire should be in it's OWN shielded jacket.

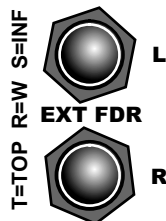
The GROUND and SHIELD of this wire should connect to the SHIELD of the jack and the INF or bottom of the fader.

The WIPER of the fader should be in it's OWN wire, and it connects to the RING of the jack. The shield should connect to the jack ground AT THE JACK END ONLY.

See below for additional information.

EXT FADER

Many faders have 2 ground connections. The second or lower connection is called a "HOP-OFF". The HOP-OFF was a way to get the wiper off of the element onto a clean ground to increase signal cut off at the bottom. This was more critical when faders were 600 and 1000 ohms, but not as critical with the more common 10K ohm faders used today.



Visit the fader company's web site for proper colors and hook-up instructions.

P&G colors

RED

Audio Taper fader,
 1K to 25K ohms

YEL

BLUE

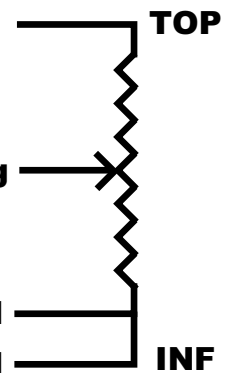
GREEN

"T" tip

"R" ring

"S" shield

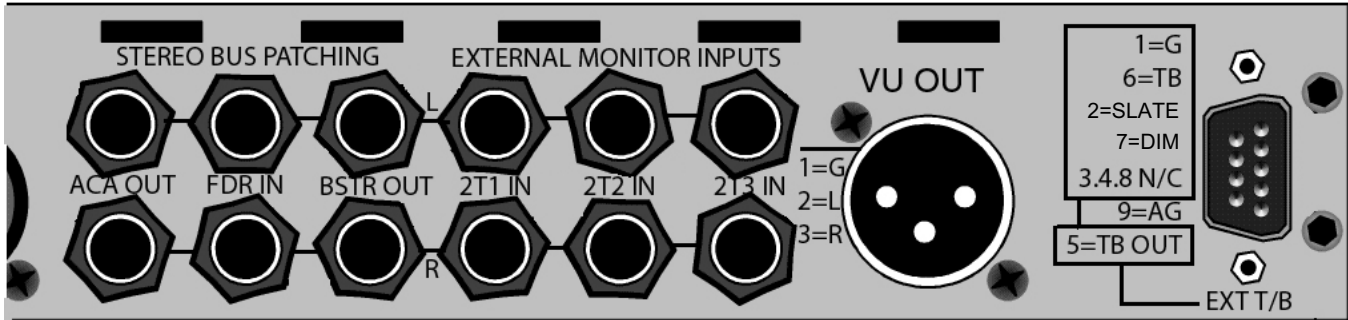
"S" shield



Rear Panel 2

STEREO SUMMING AMP OUT

This would send to a bus compressor like the API 2500.



STEREO FADER INPUT

This is where you would return a bus compressor. It is the input to the STEREO FADER.

BSTR OUT

This is the STEREO BOOSTER output. It feeds the 2 track recorder.

STEREO 2 TRACK INPUTS

These inputs are for THREE stereo balanced jacks that allow three stereo playback devices to be monitored with the 7800. These jacks are set to +4 nominal levels. Some cassettes, CD players and 2 Tracks may sound low in level because they are set for either -2 nominal levels or -10. You may need a booster for these. The VU meter will reflect the level of these when selected.

VU OUT

The VU meter output is for an analog VU meter. You must provide your own trim pot (10K) for these to be calibrated. See below for additional help.

EXT T/B

This connector allows the use of a remote talkback system to control the 7800.

PIN 1 is logic ground and is used for all logic functions.

Connecting PIN 7 to PIN 1 will engage the DIM function.

Connecting PIN 6 to PIN 1 will engage the T/B function.

Connecting PIN 2 to PIN 1 will engage the SLATE function.

PIN 5 is the talkback mic preamp output and is always live. It can be used for feeding an IFB system or another intercom setup where you need the talkback signal. PIN 9 is the audio ground for it.

VU HOOK UP

